

## **Digital Construction Submittal Requirements**

### **1.0 General**

- 1.1. The requirements of this section apply to all subsequent sections.*
- 1.2. Files must be saved and submitted on a CD-ROM in a jewel case without using file compression.*
- 1.3. The CD label shall include the following:*
  - 1.3.1. Engineering Company Name with prepared by statement
  - 1.3.2. Project Name
  - 1.3.3. Date that data is burnt onto CD
  - 1.3.4. Designate CD as Construction Plan
- 1.4. Files must be in a DXF format.*
- 1.5. Each DXF file should be for one section of development. Multiple sections will not be accepted in one file and care must be taken to clearly mark existing infrastructure facilities.*
- 1.6. If multiple sections of a project are being submitted, files shall be placed in separate directories on the CD.*
- 1.7. File names should make sense to a viewer who may not be familiar with the consulting firms naming conventions and be indicative of the contents of the file.*
- 1.8. All pertinent drawing elements will reside in the primary drawing file. There shall be no cells, nodes, blocks, or reference files (x-refs) attached to the drawing.*
- 1.9. Separate layers for structures, pipes, annotation etc. with a logical description for each layer.*
- 1.10. Projection shall be referenced to NAD83, Indiana State Plane Coordinate System, East Zone, using U.S. Survey*

*Feet and per the Hamilton County datum. Elevations shall be in the NAVD 88 vertical datum. The coordinate location of the items listed below shall be obtained by a field survey and with vertical data that meets survey grade accuracy.*

- 1.11. Tie into section corners in the Indiana State Plane Coordinate System to insure proper orientation. Section corner tie sheets can be obtained from the Hamilton County Surveyor's web page.*
- 1.12. All easements shall be represented and drawn as closed polylines representing aggregate areas.*
- 1.13. Must have graphical representation of all off-site platted easements, right-of-ways, lot lines, etc. encompassing infrastructure improvements.*

## **2.0 Infrastructure**

- 2.1. The overall digital construction file must show the following items:*
  - 2.1.1. Storm water manholes, Inlets, End Sections, Risers, Pipes
  - 2.1.2. Detention-Retention Ponds with Normal Pool Elevation & Top of Bank
  - 2.1.3. Sub-Surface Drains – street, rear yard, and laterals
  - 2.1.4. Flow line of swales and ditches with a bottom width of 1 foot or greater.
  - 2.1.5. Sanitary sewer manholes, sewers, lift stations, force mains, wyes
  - 2.1.6. Air/vacuum relief manholes
  - 2.1.7. Lateral markers
  - 2.1.8. End of stubs
  - 2.1.9. Hand holes and pavement loops
  - 2.1.10. Pipe casing

- 2.1.11. Water Main lines, laterals constructed, hydrants, and valves
  - 2.1.12. Parcel Lines
  - 2.1.13. Lot Numbers
  - 2.1.14. Lot Dimensions
  - 2.1.15. Perimeter Boundary Lines
  - 2.1.16. Right of Way Lines
  - 2.1.17. Curve Data
  - 2.1.18. Easements
  - 2.1.19. Road Centerlines
  - 2.1.20. Lots Square Feet
  - 2.1.21. Street Names
  - 2.1.22. Monumentation
- 2.2.** *The Construction location of the sewer wyes shall be located on the plans as measurement along the pipe centerline from the nearest downstream manhole.*
- 2.3.** *Sub-surface drain lateral locations should be located with a proper distance from the nearest structure or property line.*
- 2.4.** *Structures will be cells or blocks.*
- 2.5.** *All Infrastructure pipes will have a length, pipe size (in inches) and material listed.*
- 2.6.** *Infrastructure line work must be continuous polylines with a beginning and ending at a structure insertion point, connecting only two structures per line. Lines must be drawn with the direction of flow.*